

# Assessing Oil Spill Damage

### **Overview**

Oil spills pose serious threats to marine and freshwater ecosystems. A spill can harm plankton, invertebrates, fish, birds and mammals. Specifically:

- Fish and shellfish larvae are extremely sensitive to even small amounts of oil.
- Sea otters and other mammals lose their insulation when coated with oil. They suffer lung, liver and kidney damage.
- Birds coated with oil may survive if rescued, but show long-term health effects, such as breeding problems.

Besides environmental damage, when oil persists in a sensitive area it can hurt cultural and economic resources. Cleanup officials, hoping to limit the extent of damages during an oil spill, rely on resource-protection experts representing state and federal agencies and the responsible party, collectively called the Environmental Unit.

During a spill, the Environmental Unit:

- Identifies environmentally sensitive areas that may be affected and works to prevent natural-resource damage whenever possible.
- Makes recommendations on the use of dispersants and in-situ burning.
- **♦** Advises on cleanup methods and equipment.
- Oversees wildlife rescue and rehabilitation efforts.

# **Resource Damage Assessment Committee**

In 1989, state lawmakers created the Resource Damage Assessment (RDA) Committee to oversee the protection and restoration of natural resources when damaged by oil spills or other incidents. Representatives from the state departments of Ecology, Fish and Wildlife, Natural Resources, and Health, the Parks and Recreation Commission, and the Office of Archaeology & Historical Preservation serve on the committee.

## **Pre-assessment Screening**

Under state law, individuals or companies responsible for spilling oil into fresh or marine waters are liable for cleanup costs and resource damages.

Following an oil spill, the RDA Committee meets to evaluate the magnitude of the spill and the effects on resources. This process is called pre-assessment screening. The committee considers three questions during the pre-assessment screening: 1) Can the natural resources damaged by the spill be quantified at a reasonable cost?

- 2) Is it technically feasible to restore or enhance the damaged natural resources?
- 3) Has the spiller proposed a restoration and enhancement project or study to compensate the state for damages caused by the spill?

Based on the answers to these questions, the committee will decide to proceed with a formal damage assessment, work with the spiller to develop an acceptable restoration or enhancement project or study, or use the oil-spill compensation schedule.

State law requires using the compensation schedule if the answer to all the questions is "no."

### **Compensation Schedule**

It can be difficult to determine the specific monetary value for environmental damages. The Department of Ecology adopted the Pre-assessment Screening and Oil Spill Compensation Schedule in 1992 to help speed the process for assessing damages and obtaining compensation. The RDA Committee and a scientific advisory board developed a rule for this, Chapter 173-183 WAC.

The rule outlines the process for pre-assessment screening and sets up a compensation schedule that helps get damaged resources restored far sooner than the formal resource-damage assessment process.

The compensation schedule allows Ecology to collect for damages based on a \$1- to \$50-per-gallon charge. The following factors are scored when using the compensation schedule.

- ♦ Oil toxicity scores consider acute toxicity, mechanical injury and persistence values for the various oil products transported in Washington. Six classes of oil are ranked: Prudhoe Bay crude oil, bunker C, number 2 fuel oil (diesel), gasoline, kerosene and kerosene-type jet fuel. Each type of oil is scored on a 1-5 ranking (1 being the least toxic, least damaging or least persistent).
- ♦ Environmental sensitivity/vulnerability scores have an individual 1-5 ranking (1 for least sensitive or vulnerable) for type of habitat, birds, shellfish, marine fish, salmon, marine mammals and recreation. More than 130 state marine zones were individually ranked and given an environmental sensitivity score by season.
- Cleanup and protective actions to minimize the damage caused by the spill enables the responsible party (spiller) to receive credit for positive actions that protect sensitive or vulnerable resources.

When the compensation schedule is used, the score of the factors listed above are used in a mathematical formula to calculate the monetary value for damages.

Depending on the amount of oil spilled and the total scores, a 1,000-gallon oil spill could result in a compensation of \$1,000 to \$50,000. A 100,000-gallon spill could result in a compensation of \$100,000 to \$5 million.

### **Coastal Protection Fund**

Damages collected through the compensation schedule are deposited into the state Coastal Protection Fund (CPF). The CPF was established as part of the Oil and Hazardous Substance Spill Prevention and Response Act for:

- Environmental restoration and enhancement projects.
- ♦ Investigations of the long-term effects of oil spills.
- Developing and implementing an aquatic land computer geographic information system.

Monies also may be allocated for research and development regarding the causes, effects and removal of oil-spill pollution.

The CPF Steering Committee decides how the fund is used. After a major spill, the committee looks at ways to use the fund for restoration and enhancement activities in the affected area. The committee also oversees the selected restoration and enhancement projects.

### **Spill Prevention**

In an effort to better prepare for oil spills and to increase resource protection, the RDA Committee has been working through the Northwest Area Committee with interested parties along the Washington coast, Puget Sound and the Columbia and Snake rivers to create geographic response plans (GRPs). These plans identify specific environmentally sensitive areas, develop protection strategies, and prioritize the response effort during the first 12 to 24 hours after a major spill.

### **Public Involvement**

The public is invited to attend and comment at RDA Committee meetings, GRP workshops and pre-assessment screenings. In addition, the RDA Committee and the CPF Steering Committee welcome public comments and suggestions for restoration and enhancement projects.

### **Contacts**

### **RDA Committee**; **Damage Assessment Process**:

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#### **Public Involvement:**

The Department of Ecology is an equal-opportunity agency. If you have special accommodation needs, contact Mariann Cook Andrews at (360) 407-7211 (voice) or (360) 407-6006 (TDD).